



Evergreen

Delaware Community Forestry Council News



Winter, 2009-2010

Sustainable Landscapes: Reconnecting to Nature

By Susan K. Barton
University of Delaware

In a previous issue we described a sustainable landscape as a “stable and productive ecosystem that conserves the physical and biological processes occurring on that landscape.” We outlined practices that create or maintain a functioning soil ecosystem, maximize water infiltration, and maintain integrity of the watershed. Sustainable landscapes also promote plant and animal diversity and biomass, reuse and recycle materials, and help humans connect with their environment.

Plant communities serve as a foundation for a healthy ecosystem. Lawns function as play surfaces, pedestrian pathways, and uniform ground layers for plant display. However, sustainable landscapes contain only lawn spaces that perform a specific function, thereby reducing extra inputs of chemicals, energy and time. Eliminate the use of and remove vegetation that can harm ecosystems, such as recognized invasive species. Choose plants that are adapted to the site’s conditions and support native insects and birds. Consider replacing alien species with appropriate native species that achieve the same purpose (e.g. aesthetics, function). Use IPM strategies (i.e. scouting, life-cycle knowledge and decision-making based on that information) rather than calendar-based pesticide applications for pest control. Preserve as many important (mature, healthy,

Choose plants that are adapted to the site’s conditions and will support native insects and birds.



Wood aster is a native plant

native) plants as possible, and add more plants to increase biodiversity.

Manage resources and materials efficiently by reducing material needs, reusing materials generated onsite, and recycling materials as much as possible. Keep and reuse landscape by-products. For example, collect and shred leaves to use as mulch and compost vegetative debris to mix into soil improving its structure. Select and use sustainable and local landscape materials. Avoid materials, products, and practices that are harmful to the environment.

Use the landscape to reconnect people to nature. Value the human component of landscapes and social benefits gained by interaction with gardens and natural spaces. For more information visit the website: <http://www.sustainablesites.org/>.

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WHAT TREE IS IT?

CLUES:

- ✓ This deciduous tree is more common in New Castle County
- ✓ Its very hard wood has been used to make baseball bats
- ✓ Millions of these have been killed by a wood-boring insect from Asia
- ✓ This tree makes excellent firewood
- ✓ Its leaves are usually pinnately-compound
- ✓ Along with maple, dogwood, and horsechestnut, this tree is one of the few species to feature opposite branching

See answer on page 2



Community Tree Workshop: Wednesday, March 17, 6 to 8 pm

Part I: How to Plant Your New Bare Root Tree. Make sure your new tree settles in and gets off to a great start. Pick up your tree and join us for a class on tree planting technique.

Part II: How to Raise Money for Neighborhood Trees, Urban Forestry Grants Training. Learn how to start a tree planting project for your neighborhood. Grants up to \$5,000 are available from the Delaware Forest Service. We’ll teach you how to design a project, generate support from neighbors and local legislators, and apply for a grant. Call Annie Acton at (302) 658-6262, ext. 106 to register.

Location:
DE Center for Horticulture
1810 North Dupont Street
Wilmington, DE 19806
Phone (302) 658-6262
www.dehort.org

FREE to the public
- includes pizza!

Urban and Community Grant Awards

TREE PLANTING	
COMMUNITY	Amount
IRISH HILL SERVICE CORPORATION	\$ 2,200.00
SOUTH DOVER ELEMENTARY - CAPITAL DISTRICT	\$ 3,397.00
ALEXANDER VILLAGE	\$ 2,000.00
EDENRIDGE CIVIC ASSOCIATION	\$ 2,324.00
SILVER LAKE ELEMENTARY	\$ 5,000.00
TOWN OF ODESSA	\$ 795.00
BUENA VISTA - STATE CONFERENCE CENTER	\$ 827.00
CITY OF DELAWARE CITY	\$ 1,822.50
SHARPLEY CIVIC ASSOCIATION	\$ 3,750.00
WESTOVER HILLS SERVICE CORPORATION	\$ 3,750.00
2ND DISTRICT PLANNING COUNCIL	\$ 2,640.00
FOREST REACH HOA	\$ 2,850.00
VILLAGES OF FIVE POINTS A	\$ 5,000.00
VILLAGES OF FIVE POINTS B	\$ 5,000.00
BAYSHORE PROPERTY HOA	\$ 3,000.00
	\$ 44,355.50
TREE MANAGEMENT	
COMMUNITY	Amount
CITY OF DELAWARE CITY	\$ 4,092.50
BRENNAN ESTATES	\$ 2,680.00
BUENA VISTA - STATE CONFERENCE CENTER	\$ 5,000.00
TOWN OF ODESSA	\$ 2,200.00
HISTORIC RIVERVIEW CEMETERY	\$ 5,000.00
EDENRIDGE CIVIC ASSOCIATION	\$ 2,750.00
AUGUSTINE RIDGE	\$ 1,600.00
WESTOVER HILLS MAINTENANCE CORP.	\$ 3,191.00
QUAKER HILL NEIGHBORHOOD ASSOCIATION	\$ 1,270.00
2ND DISTRICT NEIGHBORHOOD PLANNING COUNCIL	\$ 1,246.50
TOWN OF DELMAR	\$ 2,370.00
OCEAN VIEW	\$ 5,000.00
	\$ 36,400.00



Diane Crom of Delaware's Division of Historical and Cultural Affairs plants a plum tree during an urban tree workshop in Dover. Crom represented Buena Vista Conference Center, the historic cultural landmark in New Castle, which received a 2009 grant.



The Delaware Forest Service's Kyle Hoyd (left) works with Kevin McBride of Lewes to plant a plum tree at a recent urban tree workshop in Dover. McBride represented the community association from Villages at Five Points, which received a 2009 grant from the Urban and Community Forestry Program.

Answer to "What tree is it?"



Ash trees (*Fraxinus* species) usually feature a very distinct leaf pattern and a characteristic pattern of opposite branches. Known for their hard and durable wood, ash trees have been commonly used to make baseball bats and other wood products.

Ash tree species are increasingly threatened by the Emerald ash borer, an exotic pest that has killed millions of trees in the Midwestern United States, and has also been found in Pennsylvania, New York, and Maryland.



Westover Hills: An Urban Grant Success Story

by Cathy Welsh

"I decided to apply for a Tree Planting Grant as we had several trees along our streets that had to be replaced and we needed more trees on a hillside common area overlooking Route 141 to shield us from the noise and pollution of the traffic there."

I am the Maintenance Chairperson of Service Corporation of Westover Hills, which is known for its magnificent trees that line the streets in our neighborhood. I am in charge of the over three hundred trees on SCWH owned land which form a leafy canopy over our streets and yards. Maintaining these trees is a huge expense which led me to apply for an Urban Forestry Grant sponsored by the Delaware Forest Service. Applying for this grant was very time-consuming, but I had help. There was a great workshop at Delaware Center for Horticulture, and Patrice Sheehan at DCH provided a lot of guidance and assistance. I decided to apply for a Tree Planting Grant as we had several trees along our streets that had to be replaced and we needed more trees on a hillside common area overlooking Route 141 to shield us from the noise and pollution of the traffic there. Patrice and our arborist, John Kerns, gave me ideas of the trees I should plant in these various locations, and then I got estimates from several tree and landscaping firms.

For my matching grant project, I chose to prune the trees on our streets. Since our trees are huge, a dead branch could do damage if it fell. I had the same firms provide estimates on pruning, but I had problems here. None of the arborists had the exact same lists, which meant that they all came up with different amounts of trees and even different trees to be pruned. I put all of their lists on a spreadsheet on my computer to discover where they disagreed and circled the trees which were not on all the lists. Taking a pen and my list of trees, I walked up and down our streets looking up at trees to discover if there were branches that needed to be pruned. My neighbors must have thought that I had gone stark-raving mad as I performed this task. You do not want to do this—it is not necessary and very time consuming. Plus you could get a stiff neck. I think my problem is that I am too much of a type A person who has to get everything right. I wanted my grant proposal to be perfect!

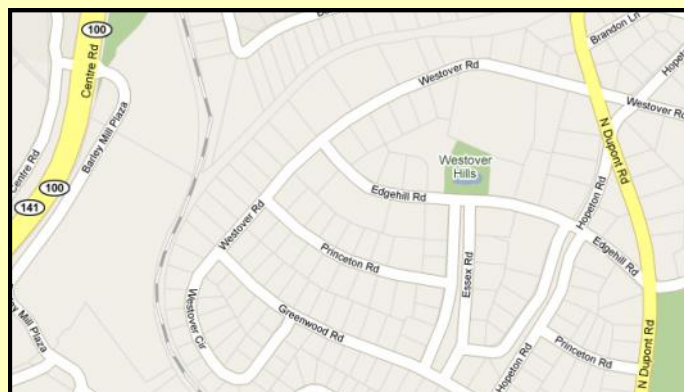
Aside from that fiasco, the rest of the grant went well. We had to get letters from various persons advocating our project, and everyone was very willing and helpful. Patrice



Westover Hills received both a tree planting and a tree management grant for their community areas.

had taken pictures of trees or places that needed trees that I wanted to include in the grant. If you don't have someone like Patrice, you need to take pictures yourself.

I used the computer to get an overhead view of our area and a friend gave me a map of our development which I used to show the location of the trees that were to be pruned and planted. Lastly, I included all the proposals from the tree firms and filled out the form on the grant proposal that showed what was being spent and what was included in the matching funds money. I put everything pertaining to the grant together, made a copy for myself and Patrice, and sent it off.



It was such a thrill when I learned that we had been chosen to receive a grant. I enjoyed going to the grant workshop in Dover for people who had been awarded grants as it was an opportunity to meet a lot of people dedicated to planting and maintaining trees. We even had a demonstration on how to correctly plant a tree. Working on the grant was a great experience and made me aware of the great work being done by the Delaware Forest Service.

Urban Forests: Key Part of State Assessment Plan

Like many states, Delaware has experienced tremendous growth over the last decade. During that time, previously unincorporated rural areas have been annexed and subsequently developed by many communities throughout the state. While this creates new opportunities for urban forestry, this growth also adds pressure on the urban forest resource. Only until the recent recession has this growth subsided.

Read a draft copy
of the Delaware State
Forest Resource
at the Delaware Forest
Service web site:
dda.delaware.gov/forestry

As funding for urban forestry has increasingly become scarce it is evident that a prioritization of communities was necessary in order to increase the efficacy of the Delaware Urban and Community Forestry (U&CF) Program.

An analysis was done in three asynchronous stages over a twelve month period. The first step was the creation of the municipal UTC layer. Step two was the creation of the fire risk layer. The final step was the calculation of percentages of UTC, impervious surfaces, and fire risk in a spreadsheet program.

The result of the analysis yielded an indexed list of all 57 communities in Delaware Ranging from zero (0) to one-hundred (100). Higher ranking indicates higher priority for U&CF program delivery. This indexed list was spatially joined to the map of municipal areas within the GIS to indicate where the priority areas were located. Based on natural breaks in the data, the indexed list of communities was displayed according to five (5) classes ranging from very low to very high priority.



Snow and Trees: Things to Consider

by Glenn Gladders
Delaware Forest Service

Our back-to-back blizzards in Delaware have many people asking, "What does the winter weather do to my trees?" The good news is that snow and ice alone do not kill or damage most trees, as long as they do not cause branches to break.

A few trees planted in Delaware, such as the southern magnolia, only grow naturally in the warmer southern States. Extreme cold can occasionally kill these trees. The cold temperature alone (rather than snow and ice, which are good insulators) causes this type of tree death.

The biggest cause for concern is the added weight of ice and snow that causes branches to break during winter weather events, sometimes leading to property damage or even injury. When ice and snow accumulate on branches, limbs can break and fall, sometimes landing on houses, vehicles, and other property. Breakage is most common

when ice accumulates on branches and strong winds occur before the ice melts. Evergreen trees are more likely to lose branches during the winter because their needles allow much more ice to accumulate on them than do the bare twigs and branches of deciduous trees. In addition to the hazards to people and property, broken branches leave behind wounds that can later attract insect pests, lead to diseases that cause rot, and disfigure the trees.

The Delaware Forest Service advocates **prevention** as the most effective way to address this issue. If you have trees that overhang your home or driveway, consider having a professional arborist examine them to determine whether a potentially hazardous situation exists. If it does, the arborist may recommend preemptive pruning of your trees to reduce the hazard. A searchable list of professionally certified arborists can be found online at:

[http://www.isa-arbor.com/
findArborist/findarborist.aspx](http://www.isa-arbor.com/findArborist/findarborist.aspx)

All of Delaware's 57 incorporated municipalities were evaluated using a Geographic Information System (GIS). The model for analysis was simply a formula that weighted each community according to four (4) criteria and the formula listed below:

$$UCF_{index} = 25 \left(1 - \frac{TC_i - TC_{min}}{TC_{max} - TC_{min}} \right) + 25 \left(\frac{IMP_i - IMP_{min}}{IMP_{max} - IMP_{min}} \right) + 35 \left(\frac{PD_i - PD_{min}}{PD_{max} - PD_{min}} \right) + 15 \left(\frac{FR_i - FR_{min}}{FR_{max} - FR_{min}} \right)$$

1. Percentage of Urban Tree Canopy (25%)
2. Percentage of impervious surface (25%)
3. Percentage of fire risk in the wildland urban interface (15%)
4. Population density (35%)